RANCHO SANTA ANA BOTANIC GARDEN
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ARISTOLOCHIA CALIFORNICA

CALIFORNIA DUTCHMAN'S PIPE

1942

RANCHO SANTA ANA BOTANIC GARDEN
of the
NATIVE PLANTS OF CALIFORNIA
Santa Ana Cañon, Orange County, California
Established 1927 in Memory of
JOHN W. BIXBY

Number 48 April 10, 1942

ARISTOLOCHIA CALIFORNICA
CALIFORNIA DUTCHMAN'S PIPE

Aristolochiaceae Birthwort Family

Twining, semi-woody, climbing vine generally 10-15 ft. high, but occasionally much higher. Branches slender pubescent, but becoming glabrate in age. Leaves deciduous, alternate, appearing in early spring after the flowers; petioles ½-1½ in. long, pubescent, blades ovate-cordate 2-6 in. long, palmately nerved. Flowers solitary or 2-3 from an axil, but closely aggregated on the terminal portions of the previous season's shoots. Peduncle about 1 in. long with a small bract near the middle. Corolla wanting. Calyx at first greenish with purple veins, later becoming cream colored with reddish-purple veins; strongly saccate, pipe-shaped, recurved, 1-¼ in. long; limb 2-lipped, the upper lip of two broadly ovate calyx lobes about ⅜ in. long, the lower a single, somewhat smaller lobe; these are lined with a reddish-purple thickening which partially closes the tube; inner surface of calyx tube, near base, has a band of deep reddish-purple about ½ in. wide. Stamens 6, adnate in 3 pairs around the sides of the ¼ in. high style, on which are 3 blunt stigmas. Ovary inferior ¼-⅜ in. long, ⅛ in. thick, 6-ribbed, becoming a 6-winged septicidal, 6-celled capsule about 2 in. long and an inch thick. Seeds numerous 3/16 in. in diameter.

The genus *Aristolochia* (derived from two ancient Greek words meaning best and parturition, because some species were thought to be of medicinal value in obstetrics) consists of at least 200 species of tropical and temperate regions. Several species are known in the eastern United States. Others, particularly from South America, are greenhouse climbers with large flowers. In addition to *Aristolochia,* the Birthwort Family is represented in California by three species of *Asarum* (Wild-Ginger), one of which is a common, creeping herb of the damp Redwood forests; the other two are largely of the Yellow Pine belt of the Sierra Nevada.

Aristolochia californica is the only species native to the Western United States, where it is confined to California. It has been collected as far south as Monterey County, but is much more common in the Coast Ranges from north of San Francisco Bay to the head of the Sacramento Valley, and south in the Sierra Nevada foothills to the Sacramento region. The species was first discovered by Dr. J. M. Bigelow who collected flowering specimens "near Corte Madera, California" on April 16, 1854. This locality is in Marin County. Bigelow's specimens were described in 1857 by Dr. John Torrey, famous American botanist. It is of interest to note that *Aristolochia californica* has thus been known for 85 years, during which time no additional botanical names have been proposed.

Dr. Bigelow was botanist for the Pacific Railroad Survey in charge of Lieut. A. W. Whipple during 1853-'54. The main botanical reports of the survey covered the route from Fort Smith, Arkansas to San Pedro, California. Thereafter, Dr. Bigelow collected in central coastal California and in the Sierra Nevada, which added greatly to the value of the now famous report of which the printing of 10,000 copies was authorized by the Senate on February 24, 1855.

The California Dutchman's Pipe (name merely an adaptation from other species known as Dutchman's Pipes) is fairly frequent in the wild, but unless searched for, is seldom seen. Its favorite habitat is in low ground near streams of the foothills where it climbs willows or other woody plants. We have found it in the open Sacramento Valley near Chico, Butte County, climbing the Roble or Valley Oak (*Quercus lobata*), but in the same area old fences seemed equally attractive habitats, and many stems trailed along the ground forming a tangled mat beneath the carpet of fallen leaves.

The grotesque but interesting flowers of *Aristolochia californica* are generally borne in great profusion and appear from late January until April. Since they precede the leaves they are conspicuous. A large old plant will often bear several thousand flowers. The leaves appear shortly after the flowers and soon form a thick covering of light green over the entire plant. The winged capsules are nearly full sized by June, but do not mature until about September.

Our plants of the California Dutchman's Pipe were obtained by digging a few rooted shoots in October of 1930 from a creek bed of the Sierra Nevada foothills of Yuba County. From these few plants we have increased our stock easily by merely digging up rooted shoots from around the old plants during the dormant season. We have not grown this from seed, but those who have, report that it is not at all difficult. Successful cultivation of this species appears possible in nearly any soil, provided the site is in partial shade, with abundant moisture and some support, such as a tree or trellis. For several years we used this climber along the east wall of our old lath-house. With a little training three plants covered an area about 35 feet long and 8 feet high. The advantages of this vine for such usage are that its deciduous nature permits nearly the full amount of sunshine to enter the lath-house during winter, but in the summer cuts down the sunshine as well as helping to control the humidity. Scale insects occasionally attack it, but these can be controlled by using an oil spray.

It is unlikely that the California Dutchman's Pipe will ever attain great popularity as a climbing vine in California gardens because of the wealth of exotic vines available. However, those who search for the unusual in plants will find this an interesting subject, especially in areas where many of the less hardy vines will freeze. Plants are available from dealers in California Native Plants.

CARL B. WOLF

RANCHO SANTA ANA BOTANIC GARDEN

Dedication of Garden Foundation to the Board of Trustees for the Rancho Santa Ana Botanic Garden of the Native Plants of California:

"THE NATURE, OBJECT AND PURPOSE OF THE INSTITUTION HEREBY FOUNDED AND TO BE MAINTAINED HEREUNDER.

ITS NATURE: A botanic garden of the native plants of California, herbarium and botanical library, containing living and/or preserved specimens of trees, plants and flowers native to California, and literature relating thereto.

ITS OBJECT: The preservation and improvement of the property now transferred and such property as may hereafter be transferred to the Trustees for those who not only wish to enjoy, but to study, assembled in one accessible locality, native California plants; and for the advancement of science and education with reference to plant life indigenous to the State of California.

ITS PURPOSES: (a) An institution founded primarily for scientific research in the field of local botany.

(b) To preserve the native California flora, try to replenish the depleted supply of some of the rarest plants which are rapidly being exterminated, and bring together in a comparatively small area as complete a collection of the rich store of native California plants as can be grown in this southern section of the state, thereby promoting the general welfare of the people of the state by providing the means for encouraging and carrying on the above mentioned activities in said state and by doing such other things as may be necessary and desirable to carry out the objects hereof."

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